

CURRICULUM VITAE  
THERESA ANN DEISHER, Ph.D.



Dr. Theresa Deisher's career has focused on discovering and developing new therapies for grievous human illness. Dr. Deisher obtained her Ph.D. in Molecular and Cellular Physiology from Stanford University and has spent over 20 years in commercial biotechnology, working with companies such as Genentech, Repligen, ZymoGenetics, Immunex and Amgen, prior to founding AVM Biotechnology and Sound Choice Pharmaceutical Institute (SCPI). AVM Biotechnology is the marquee prolife biotech company worldwide, certifying that it does not use morally illicit material in any process. SCPI's mission is to end human trafficking in biomedical research.

Dr. Deisher is an inventor on 23 issued US patents, and her discoveries have led to clinical trials of FGF18 for osteoarthritis and cartilage repair, and for Factor XIII for surgical bleeding. Dr. Deisher was the first person to discover adult cardiac derived stem cells, and has been a champion of adult stem cell research, both professionally and

privately, for two decades. Dr. Deisher was a plaintiff in the US federal lawsuit to prohibit use of federal tax payer dollars for embryo destructive research, which was instrumental in steering science towards adult stem cell research, which has led to 14 US FDA approved adult stem cell products and the Washington Post Dec 2013 headline "Scientists go ethical in 2013".

She is a frequent lecturer on the stem cell issues delving into topics such as ; research, clinical progress, policy, economics and ethics. She provides a breath of fresh air with a common sense approach which allows lay audiences to readily grasp the issues. Dr. Deisher has appeared on numerous radio shows, televised debates and live on The World Over Live with Raymond Arroyo.

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EDUCATION

1990-1993 Post-Doctoral Fellowship, University of Washington,  
Department of Pathology/Hematology, Seattle, WA.,  
Dr. John Harlan.

1985-1990 Ph.D., Department of Molecular and Cellular Physiology,  
Stanford University, Stanford, CA., Dr. Michael Fowler.  
(Dissertation) Catecholamine-Induced Cardioxicity: Basic Mechanisms of Disease  
and Prevention. Evaluation of the Role of Beta-Adrenergic Stimulation, Cellular Calcium  
Handling, and Oxygen Radical Production.

1980-1984 B.A., Department of Human Biology, Stanford University;  
degree concentration in cardiovascular and exercise physiology.  
Graduated with honors and distinction.

## **EXPERIENCE**

Inventor on 23 issued US patents

### **Patented discoveries currently in clinical trials:**

FGF18 (zFGF5) is currently in Ph II clinical trials for both osteoarthritis and for cartilage repair (Merck licensee), while Novo Nordisk (licensee) completed Ph II surgical bleeding clinical trials for Factor XIII in February 2011.

### **Selected list of Presentations and Awards:**

May 2014, Minneapolis Legatus Dinner "Stemming the Tide."

May 2014, Autism One Chicago, IL. "Worldwide Autism Epidemic and Fetal Manufactured Vaccines."

May 2014, LSN International Forum, Rome, Italy "Ending Human Trafficking in Biomedical Research"

May 2014, "Ending Human Trafficking in Biomedical Research" Minneapolis ACCW.

Apr 2014, Pacific Lutheran University, "Ending Human Trafficking in Biomedical Research"

Mar 2014, guest appearance on Life Matters TV with Brendan O'Connell

Dec 2013, Oregon Health Sciences University Family Medicine Research & Scholarship Conference "Environmental Triggers and World Wide Autism Disorder "The Perfect Storm?""

Oct 2013 recipient, Legacy Institute Community Service Award.

Nov 10, 2012 recipient Fr. Spitzer's Healing the Culture 2012 Cultural Hero Award.

July 17 & 19, 2012 The Legacy Institute Radio Show with Carrie Abbot

July 11, 2012 CS Lewis Fellows Program on Science and Society

May 25, 2012 Autism One National Conference, Chicago, IL, plenary speaker

May 04, 2012, Legatus National Culture of Life conference speaker

April 21, 2012 Fort Myers, FL speaking event; co-speakers John Haas, George Weigel

March 26, 2012 Lafayette, LA speaking events

February 24, 2012 American Association of Pro-life OBGYNs annual meeting speaker

December 13, 2011: Bishop Blanchet HS guest AP Biology lecturer.

October 26, 2011 The Legacy Institute Radio Show with Carrie Abbot

July 2011 CS Lewis Fellows Program on Science and Society: "Common Sense Approach to Stem Cell Choices" and "Vaccines and Human Fetal DNA Contaminants."

June 2011: Catholic Professionals of Seattle: "The Commoditization of Human beings for Biomedical Research"

May 2011: Cedar Park Assembly of God: "State of the Field of Stem Cells in the US"

April 2011: National Medical Students for Life Meeting "Vaccines and Aborted Fetal DNA Contaminants"

April 2011: Testimony to Minnesota Health and Human Services Committee on the use of aborted fetal cell lines for vaccine production and the resulting autism epidemic.

Deisher, T.A.

Dec 2010 Human Life International Medical Conference The Commoditization of America's Children for Biomedical Research.

Nov 10, 2010 The Legacy Institute Radio Show with Carrie Abbott

Catholic Medical Association meeting Oct 2010 Conscience Rights and Pharmaceutical Practices and Human Fetal Cell Lines for Biomedical Research and Drug Production

Discovery Institute Oct 2010 with Wesley Smith : Is the Wall Against Human Cloning about to Fall?

September 2010 multiple radio appearances regarding adult stem cell therapies as a plaintiff in Sherley vs Sebelius.

Oct 2010 What Are Stem Cells and What are They Good for? St. Hubert's Whidbey Island

August 2010 Live appearance on Raymond Arroyo World Over Live

August 2010 Laura Ingraham talk radio

April 2010 Presentations to Baker Diocese Right to Life Committees on stem cells and pharmaceutical manufacturing practices.

April 2010 Scientific expert testimony for MN Full Disclosure and Informed Consent Legislation (Brod).

February 2010 Assisted South Dakota FRC chapter in defeat of embryonic stem cell research legislation by individual meetings with KOLs and testimony to full committee.

Oct 2009, One More Soul Conference presenter

May 30, 2009 presentation to Seattle chapter of the Catholic Medical Association "Conscience Rights and Pharmaceutical Practices".

May 15, 2009 presentation to Yakima chapter of the Christian Medical and Dental Association "Conscience Rights and Pharmaceutical Practices".

March 10, 2009 Sound Insight radio program with Tom Curran discussing President Obama's Executive Order to fund embryonic stem cell research.

March 03, 2009 Testimony to Oregon Legislative Commerce Committee on stem cells.

February 10, 2009 Bellevue, WA., Rotary International "Big Macs, Vaccines and Informed Consent."

January 26, 2009 "The Science and Promise of Adult and Embryonic Stem Cell Research," Literary and Travel Women's Club, Seattle, WA.

January 23, 2009 "Fostering and Understanding Personhood in Scientific Stem Cell Research," American Life League conference, Washington, D.C.

January 21, 2009 "March for Life Plenary Session," Washington, D.C.

October 03, 2008, presentation to the Physicians Resource Council, Colorado Springs, CO.

September 26, 2008 University District Seattle, WA., Rotary International "Big Macs, Vaccines and Informed Consent."

September 11, 2008 presentation to United States Congressional Values Action Team.

September 09, 2008, presentation to United States Senate Values Action Team.

September 08, 2008, radio interview on "Business Off the Beaten Path: Blog Talk Radio with Mary Anne Dorward".

June 26, 2008, Focus on the Family, Colorado Springs, CO "Vaccines, Abortion and the conception of AVM Biotechnology to provide alternatives."

June 04, 2008, radio interview with Martha Kleider, Concerned Women for America, "Embryonic Stem Cell Research Bill Resurfaces."

March 2008, Catholic Medical Association "Spotlight on Theresa Deisher, AVM Biotechnology." by John Brehany.

March 23, 2008, National Catholic Register "Seattle Scientist Launches Pro-Life Biotech Company." by Steve Weatherbe.

March 04, 2008, Sacred Heart Radio, Cincinnati, OH "Stem cell interview."

February 11, 2008 "The Ethics and Promise of Stem Cells," University of Washington Medical Students for Life.

2007 Distinguished Graduate, Assumption-St. Bridget School.

Deisher, T.A.

**Theresa Deisher**, "Conversations with Fr. Bob" December 2007

[The Conversations with Father Bob](#)

**Theresa Deisher**, "The Science and Promise of Adult and Embryonic Stem cells" Assumption Church November 2007

**Theresa Deisher**, September 2007 presentation to Group Health Senior Association "Stem Cells, what are they and what are they good for?"

**Theresa Deisher**, panel participant, "Stem Cells, what are they and what are they good for?" Assumption Church May 2007.

**Theresa Deisher**, panel participant Channel 9 KCTS Connects March 15, 2007 stem cell discussion with Ron Reagan, Jr., Jim McManus, Pastor Joe Fuiten.

**Theresa Deisher**, panel participant, February 2007 presentation to Washington State Republican caucus "Which stem cell to choose?"

**Theresa Deisher**, panel participant, January 2007 presentation to Positive Christian Agenda "Current state of stem cell research and where it is going."

**Theresa Deisher**, panel participant, October 2006 MIT forum on stem cells.

**Theresa Deisher**, "Stem Cell Research: What it is and why it matters." Panel participant, May 2006, Washington State Mainstream Republicans Convention.

**Theresa Deisher**, Amgen, Inc. Dept. of Inflammation, Seattle, WA., "4-1BB Beyond Co-stimulation: The 4-1BB Pathway Directly Modulates Cardiac Contractility and Apoptosis" (University of Washington/ Fred Hutchinson Cancer Research Center/ Amgen annual symposium 2006 invited oral presentation).

**Theresa Deisher**, Amgen, Inc., Dept. of Inflammation, Seattle, WA., "Cardiovascular Research at Amgen WA Site: The Set-Up, The Event and The Outcome". (invited seminar, University of British Columbia, iCapture Centre, June 2005).

Stefanie Bonigut\*, Kimberly Alford\*, Bernie Buetow, Xiao zhen Wang, and **Theresa Deisher** Amgen Inc., Dept of Inflammation, Seattle, WA., The immune co-stimulatory molecule, 4-1BB, is expressed by damaged cardiac interstitial cells, and 4-1BB/4-1BBL signaling contributes to Adriamycin-induced cardiomyopathy in mice. (2003 American Heart Association Scientific Sessions oral presentation given by T. Deisher). *Circulation* 2003, 108(17) 276.

B Yanagawa<sup>1</sup>, S Bonigut<sup>2</sup>, H Luo<sup>1</sup>, T White<sup>3</sup>, GF Schreiner<sup>3</sup>, J Yuan<sup>1</sup>, M Zhang<sup>1</sup>, P Cheung<sup>1</sup>, **T Deisher**<sup>2</sup>, T Daniel<sup>2</sup>, DC Yang<sup>1</sup>, BM McManus<sup>1</sup> **GENE PROFILING IN CVB3-INFECTED MOUSE HEARTS** Research Award NW CV Frontiers Feb 2-4, 2003

California Young Investigator Cardiovascular Research Symposia. Jul 27-29, 1989. Santa Barbara, California.

California Young Investigator Cardiovascular Research Symposia. Aug 11-13, 1988. Santa Barbara, California.

## **RESEARCH**

January 2008 -

AVM Biotechnology, LLC

CEO, Founder and Research and Development Director

*Dedicated to safe, effective, affordable and ethical human therapeutics, focusing initially on regenerative medicine and vaccinations.*

June 2008-

Sound Choice Pharmaceutical Institute

Deisher, T.A.

President

*Committed to providing education, scientific research, development and resources to encourage safe and moral medicines and therapeutics.*

Sept 2006 – Oct 2007

CellCyte Genetics Corporation  
Vice President, Research and Development

July 2002 – July 2006

Amgen Inc., Seattle, WA.  
Principal Scientist, Inflammation Department.

- Interdepartmental Project Leader
- Directly supervised four staff from mid- to senior-research associate level.
- Post-Doctoral Advisor to Xiaozhen Wang, who is currently a Research Scientist with Centocor/Eli Lilly in the Stem Cell Department.
- Summer intern mentor for two students evaluating the impact of co-stimulatory molecules and GHSR agonists on cardiac contractility.
- Co-contributor to two patents related to the use of anti-cytokine therapies for heart failure. Lead inventor on a patent describing the mobilization and use of ckit+ stem cells for cardiac repair.

Responsible for a multi-disciplinary team working on the biology and commercial development of novel co-stimulatory pathways involved in the initiation and progression of cardiac failure. My research interests encompassed stem cell therapies for myocardial regeneration, the role of cytokine and co-stimulatory molecules in heart failure (ischemic, myocarditic and cytotoxic), and novel ectonucleotidases for stroke, atherosclerosis and plaque rupture.

My research group introduced non-invasive imaging technologies to the company, including ultrasound (echocardiography) and near-infrared imaging. We were named an official 'Site of Excellence' by Philips Medical for our pioneering work in standardizing rodent echocardiography methods.

Additional responsibilities have included presentation to the research review board, and serving on inter-departmental task forces to evaluate licensing opportunities, internal research opportunities, and new clinical indications. Academic

research collaborations have included: Dr. David Pinsky, Chief of Cardiology, University of Michigan, Dr. Myron D. Ginsberg, University of Miami, and Dr. Bruce

McManus, iCapture Centre University of British Columbia.

October 2000-July 2002

**Immunex Corp**, Seattle, WA.  
Senior Staff Scientist, Vascular Biology

- Project Leader – Anti-Thrombotics
  - Project Leader – Inflammation and Myocardial Repair
- Responsibilities were carried over to my position at Amgen, Inc.

1995-2000

**ZymoGenetics, Inc.**, Seattle, WA.

1998-2000

Senior Scientist, Cardiovascular Biology

1995-1998

Scientist, In Vivo Biology

- Project Leader – FGF18
- Directly supervised two staff research associates
- Contributed to the filing of over 15 patents related to the discovery of novel ESTs and proteases.

At ZymoGenetics I directed a research program focused on the discovery of cardioprotective compounds for ischemic or cytotoxic damage. I was responsible for the development of a micro-surgical model of ischemia-reperfusion, in addition to

executing established models of heart failure such as catecholamine or anthracycline administration. My work in this area led to the discovery of a novel regenerative growth factor (licensed to Serono for development) and to the identification of adult cardiac stem cells (see patent list).

Additional areas of research at ZymoGenetics included hematopoiesis, diabetes and obesity. Academic collaborators included Dr. Michael Schneider, Baylor College of Medicine, Dr. Brad Olwin, University of Colorado, Dr. Michael Fowler, Stanford University.

1993-1995

Research Scientist, **Repligen Corp.**, Cambridge, MA., Inflammation Department.

- Directly supervised four staff from junior associates to scientist positions.
- Served on Repligen/Eli Lilly joint development committee.

Responsibilities included the development of research and clinical assays in support of Phase I and Phase II clinical trials of an anti-CD11b mAb for ischemia-reperfusion injury. Research interests included neutrophil-mediated inflammation and hematopoiesis.

1988-1990

Research Associate, **Genentech, Inc.** South San Francisco, CA., Cardiovascular Pharmacology Department

Developed in vitro and in vivo assays in support of the gpIIb/IIIa program. Other research areas involved plaque rupture and the development of models and methods to study the response of vascular smooth muscle to balloon injury.

1983-1984

Honors Student, Dr. H. Craig Heller (mentor), Human Biology Department, Stanford University; honors thesis research on central versus spinal control of thermoregulation.

1980-1981

Research Assistant, Department of Medicine, Stanford University.

Group.

Data compilation and analysis for the Stanford High Blood Pressure Prevention Study

### Academic Teaching Experience

1988-1989 Undergraduate Honors Thesis Advisor

1986-1987 Undergraduate Honors Thesis Advisor

Fall 1987 and 1988

Lecturer, Department of Physiology, Stanford University School of Medicine "Vascular Smooth Muscle" series (graduate/medical school course)

1985-1986 & 1984-1985

Teaching Assistant, Department of Biology, Human Physiology course, Stanford University (undergraduate course).

### SOCIETY MEMBERSHIPS

1998 - present AHA member: Council on Basic and Clinical Science

1999 - present Heart Failure Society of America member

### GRANTS and AWARDS

M.J. Murdoch Charitable Trust, February 2010. "Population, Bioinformatics and In Vitro Studies into the Relationship between Residual Human DNA Vaccine Contaminants and Autism." \$500,000.00

American Heart Association, California Affiliate Grant-In-Aid recipient, 1988. "Biochemical Aspects of Catecholamine-Induced Cardio toxicity." \$30,000

American Heart Association, California Affiliate Grant-In-Aid recipient, 1989. "Biochemical Aspects of Catecholamine-Induced Cardio toxicity." \$30,000 (renewed)



## **BIBLIOGRAPHY**

### **Selected MANUSCRIPTS and Scientific Presentations:**

LaMadrid, M, Brown C, **Deisher T** : "US Autistic Disorder (1970-2002) Change points Do Not Coincide With Change points for Suspected Sociologic and Environmental Causes", submitted for publication to Autism Research March 16, 2011.

International Meeting for Autism Research May 2010, poster presentations of abstracts below:

"Computational Detection of Homologous Recombination Hotspots in X-Chromosome Autism Associated Genes,"

"Quantitative Evaluation of Sociologic Factors That Can Lead to Apparent Increases in Autism Prevalence"

Effects of granulocyte-colony stimulating factor on bone marrow-derived progenitor cells in murine cardiac transplantation.

Rezai N, Deisher TA, Heine HL, Wang X, Corbel SY, Leung J, Kerjner A, Rossi FM, Podor TJ, McManus BM. Cardiovasc Pathol. 2010 Jan-Feb;19(1):36-47. Epub 2009 Jan 14

Deisher TA, "Why Are We Celebrating Reprogramming of Adult Cells?" Celebrate Life, March-April 2008, pages 34-35.

Caroline T.Y. Cheung<sup>1</sup>, **Theresa Deisher**<sup>2</sup>, Honglin Luo<sup>1</sup>, Bobby Yanagawa<sup>1</sup>, Stefanie Bonigut<sup>2</sup>, Amrit Samra<sup>1</sup>, Hongyan Zhao<sup>1</sup>, Elizabeth Walker<sup>1</sup>, Bruce M. McManus.

Neutralizing Anti-4-1BBL Treatment Improves Cardiac Function in Viral Myocarditis. Lab Investigations 2007 v87(7) 651-661.

Yanagawa B, Taylor L, **Deisher TA**, Ng R, Schreiner GF, Triche TJ, Yang D, McManus BM.

Affymetrix oligonucleotide analysis of gene expression in the injured heart. Methods Mol Med. 2005;112:305-20.

Sean P. Mazer, Matthew C. Hyman, Diane Bouis, **Theresa A. Deisher**, Kim E. Olson, M. Johan Broekman, Aaron J. Marcus, David J. Pinsky. "Ecto-enzymatic suppression of atherogenesis by CD39." Submitted to Nature June.

Xiaozhen Wang, Stefanie Bonigut, Kimberly Alford, Dong Xia, Eric Butz, **Theresa A. Deisher** "Inhibition of the tumor necrosis factor receptor family member, 4-1BB, alleviates doxorubicin-induced apoptosis and improves cardiac function in mice." under revision for resubmission to Circulation 2007.

Ludmila Belayev, Larissa Khoutorova, **Theresa A. Deisher**, Andrey Belayev, Raul Busto, Yongbo Zhang, Weizhao Zhao, and Myron D. Ginsberg, "The Neuroprotective Effect of SolCD39, A Novel Platelet Aggregation Inhibitor, On Transient Middle Cerebral Artery Occlusion In Rats". Stroke 34:758-763, 2003.

Whitmore TE, Maurer MF, Sexson S, Raymond F, Conklin D, **Deisher TA**. "Assignment of fibroblast growth factor 18 (FGF18) to human chromosome 5q34 by use of radiation hybrid mapping and fluorescence in situ hybridization". Cytogenetics & Cell Genetics. Vol 190(3-4) (pp 231-233), 2000.

**Deisher, T.A.:** "Cardiac-derived Stem Cells". J Drugs 3(6)483-488, 2000.

Ghosh D, **Deisher TA**, Ellsworth JL. "Statistical methods for analyzing repeated measures". Journal of Pharmacological & Toxicological Methods. 42(3):157-62, 1999.

Grossman A, Lenox J, **Deisher TA**, Ren HP, Humes JM, Kaushansky K and Sprugel KH : "Synergistic Effects of Thrombopoietin and G-CSF on Neutrophil Recovery in Myelosuppressed Mice", Blood 88(9) 3363-3370, 1996.

Deisher, T.A.

McCarty JM, Yee EK, **Deisher TA**, Harlan JM and Kaushansky K: "Interleukin-4 induces endothelial vascular cell adhesion molecule-1 (VCAM-1) by an NF- $\kappa$ B independent mechanism". FEBS Letters 372(2) 194-198, 1995.

**Deisher TA**, Bristow MR, Billingham ME and Fowler MB: "Spontaneous-reversibility of catecholamine-induced cardiotoxicity in rats". Am J Cardiovasc Pathol 5(1) 79-88, 1994.

**Deisher TA**, Sato TT, Pohlman TH and Harlan JM: "A Protein Kinase C Agonist, Selective for the  $\beta$ 1 isozyme, Induces E-selectin and VCAM-1 Expression on HUVEC but does not Translocate PKC". Biochem Biophys Res Commun 193(3) 1283-1290, 1993.

**Deisher TA** and Harlan JM: "Inhibitors of topoisomerase II prevent cytokine-induced expression of vascular cell adhesion molecule-1, while augmenting the expression of endothelial leukocyte adhesion molecule-1 on human umbilical vein endothelial cells". Cell Adhesion and Communication 1:133-142, 1993.

**Deisher TA**, Garcia I and Harlan JM: "Cytokine-induced adhesion molecule expression on human umbilical vein endothelial cells is not regulated by cyclic adenosine monophosphate accumulation". Life Sciences 53(4) 365-370, 1993.

**Deisher TA**, Haddix TL, Montgomery KF, Pohlman TH, Kaushansky K and Harlan JM: "Protein kinase C differentially regulates the expression of ELAM-1 and VCAM-1 in human umbilical vein endothelial cells". FEBS Letters 331(3) 285-290, 1993.

**Deisher TA**, Narita H, Ginsburg R, Zera P, Billingham M, Hoffman BB: "Epinephrine-induced cardiac injury in rats: protective effect of clentiazem, a new calcium antagonist". J Pharmacol Exp Ther 266(1) 262-269, 1993.

Barker PL, Bullens S, Bunting S, Burdick DJ, Chan KS, **Deisher T**, Eigenbrodt C, Gadek TR, Gantzos R, Lipari MT: "Cyclic RGD peptide analogues as antiplatelet antithrombotics". J Med Chem 35(11) 2040-2048, 1992.

Dennis MS, Henzel WJ, Pitti RM, Lipari MT, Napier MA, **Deisher TA**, Bunting S, Lazarus RA: "Platelet GP IIb/IIIa Antagonists from Snake Venoms: Evidence for a Family of Platelet Aggregation Inhibitors". Proc Natl Acad Sci 87(7) 2471-2475, 1990.

**Deisher T**, Mankani S, Hoffman BB: "Role of cAMP-dependent protein kinase in the diminished beta-adrenergic responsiveness of vascular smooth muscle with increasing age". J Pharm Exp Ther: 249(3)812-819, 1989.

Bristow M, Sandoval R, Gilbert M, **Deisher T**, Minobe W, Rasmussen R: "Myocardial Alpha- and Beta-Adrenergic Receptors in Heart Failure: Is Cardiac Derived Norepinephrine the Signal?" Eur Heart J: 9(sH)35-40, 1988.

#### **PATENTS:**

| Title   | Publication number | Publication date | Inventor(s)  | Applicant(s)  | European classification |
|---|--------------------|------------------|--|---|-------------------------|
| Disintegrin homologue, MAHBP  | US2003153064 (A1)  | 8/14/2003        | SHEPPARD PAUL O [US]; BAIN DUR NAND [US]; DEISHER THERESA A [US]; BISHOP PAUL D [US]; TAFT DAVID W [US]                                      | ZYMOGENETICS INC [US]   | C12N9/64F2C24           |
| SGIP peptides   | US2003176640 (A1)  | 9/18/2003        | SHEPPARD PAUL O [US]; JASPERS STEPHEN R [US]; DEISHER THERESA A [US]; BISHOP PAUL D [US]   | ZYMOGENETICS INC [US]   | C07K14/47; C07K14/575   |
| Low-power noise characterization over a                                 | US2004002860 (A1)  | 1/1/2004         | DEISHER MICHAEL E [US]; MORRIS ROBERT W [US]   | INTEL CORP [US]   | G10L21/02A1; G10L11/00A |
| USE OF TUMOR NECROSIS FACTOR INHIBITORS TO TREAT CARDIOVASCULAR DISEASE | WO02080847 (A2)    | 10/17/2002       | WARREN MARSHELLE S [US]; DEISHER THERESA A [US]  | IMMUNX CORP [US]; WARREN MARSHELLE S [US]; DEISHER THERESA A [US]   | A61K38/17C; G01N33/68V  |
| Use of tumor necrosis factor inhibitors to treat cardiovascular         | US2004072805 (A1)  | 4/15/2004        | WARREN MARSHELLE S [US]; DEISHER THERESA A [US]  | WARREN MARSHELLE S ; DEISHER THERESA A                              | G01N33/68V              |
| Novel FGF homologs  | US2003008351 (A1)  | 1/9/2003         | DEISHER THERESA A [US]; CONKLIN DARRELL C [US]; RAYMOND FENELLA C [US]; BUKOWSKI THOMAS R [US]; HOLDERMAN SUSAN D [US]; SHEPPARD PAUL O [US] | ZYMOGENETICS INC [US]   | C07K14/50               |
| Testis specific transcription factor ZGCL-1                             | US2002160487 (A1)  | 10/31/2002       | YEE DAVID P [US]; DEISHER THERESA A [US]   | ZYMOGENETICS INC [US]   | C07K14/47A1             |
| Zsig33-like peptides  | AU6303201 (A)      | 11/26/2001       | JASPERS STEPHEN R; SHEPPARD PAUL O; DEISHER THERESA A; BISHOP PAUL D   | ZYMOGENETICS INC  | C07K14/63               |
| Disintegrin homologs  | US2002072102 (A1)  | 6/13/2002        | SHEPPARD PAUL O [US]; BAIN DUR NAND [US]; DEISHER THERESA A [US]; BISHOP PAUL D [US]   | SHEPPARD PAUL O ; BAIN DUR NAND ; DEISHER THERESA A ; BISHOP PAUL D | C12N9/64F2C24           |
| Disintegrin homologs.   | ZA200007766 (A)    | 12/21/2001       | SHEPPARD PAUL O; BAIN DUR NAND; DEISHER THERESA A; BISHOP PAUL D   | ZYMOGENETICS INC  | C12N9/64F2C24           |
| METHOD OF FORMING A PEPTIDE-RECEPTOR COMPLEX WITH ZSIG33                | WO0138355 (A2)     | 5/31/2001        | SHEPPARD PAUL O; JASPERS STEPHEN R; DEISHER THERESA A; BISHOP PAUL D   | ZYMOGENETICS INC [US]   | C07K14/575              |

|   |                   |            |   |   |  |
|---|-------------------|------------|---|---|--|
| Fibroblast growth factor homologs   | EP2339002 (A1)    | 6/29/2011  | DEISHER THERESA A [US]; CONKLIN DARRELL C [ES]; RAYMOND FENELLA C [US]; BUKOWSKI THOMAS R [US]; JULIEN SUSAN D [US]; HANSEN BRIGIT [US]; SHEPPARD PAUL O [US] | ZYMOGENETICS INC [US]   | A61K47/48R; A61K47/48T4; C07K14/50; C07K16/22; C12N5/06B6C |
| FGF HOMOLOGS COMPOSITIONS AND USES THEREOF  | US2010160235 (A1) | 6/24/2010  | DEISHER THERESA A [US]; CONKLIN DARRELL C [GB]  |   | A61K38/18C   |
| ADJUSTMENT OF TEMPORAL ACOUSTICAL CHARACTERISTICS   | US2010169075 (A1) | 7/1/2010   | RAFFA GIUSEPPE [US]; NACHMAN LAMA [US]; GRAUMANN DAVID L [US]; DEISHER MICHAEL E [US]   |   | G10L13/04U; G06F17/27R4                                    |
| Methods of using motilin homologs   | US2009270333 (A1) | 10/29/2009 | SHEPPARD PAUL O [US]; DEISHER THERESA A [US]; BISHOP PAUL D [US]; JASPERS STEPHEN R [US]; LABROO VIRENDER M [US]  | ZYMOGENETICS INC [US]   | C07K14/575   |
| TML polynucleotides   | US2008194484 (A1) | 8/14/2008  | SHEPPARD PAUL O [US]; DEISHER THERESA A [US]; JASPERS STEPHEN R [US]; BISHOP PAUL D [US]  | ZYMOGENETICS INC [US]   | C07K14/575   |
| HANDHELD DEVICE ASSOCIATION VIA SHARED VIBRATION  | US2009169018 (A1) | 7/2/2009   | DEISHER MICHAEL E [US]  |   | H04L9/32   |
| NOVEL FGF HOMOLOGS  | US2008233114 (A1) | 9/25/2008  | DEISHER THERESA A [US]; CONKLIN DARRELL C [US]; RAYMOND FENELLA C [US]; BUKOWSKI THOMAS R [US]; HOLDERMAN SUSAN D [US]; SHEPPARD PAUL O [US]                  | ZYMOGENETICS INC  | C07K14/50  |
| Disintegrin homologs  | US2006024805 (A1) | 2/2/2006   | SHEPPARD PAUL O [US]; BAINDUR NAND [US]; DEISHER THERESA A [US]; BISHOP PAUL D [US]; TAFT DAVID W [US]  | ZYMOGENETICS INC  | C07K14/47; C12N9/64F2C24                                   |
| SGIP peptides   | US2005208626 (A1) | 9/22/2005  | SHEPPARD PAUL O [US]; JASPERS STEPHEN R [US]; DEISHER THERESA A [US]; BISHOP PAUL D [US]  | ZYMOGENETICS INC  | C07K14/63; C07K7/06A                                       |
| METHODS OF USING G-CSF MOBILIZED C-KIT+ CELLS IN THE PRODUCTION OF EMBRYOID BODY-LIKE CELL CLUSTERS FOR               | WO2005047491 (A2) | 5/26/2005  | DEISHER THERESA [US]; WANG XIAOZHEN [US]; BEGLEY C GLENN [US]   | AMGEN INC [US]; DEISHER THERESA [US]; WANG XIAOZHEN [US]; BEGLEY C GLENN [US] | A61K35/28; C12N5/06B2L; C12N5/06B6P; C12N5/06B21P          |
| Methods of using G-CSF mobilized C-Kit+ cells in the production of embryoid body-like cell clusters for tissue repair | US2005186182 (A1) | 8/25/2005  | DEISHER THERESA [US]; WANG XIAOZHEN [US]; BEGLEY C G [US]   | DEISHER THERESA, ; WANG XIAOZHEN, ; BEGLEY C. G                               | C12N5/06B2L; C12N5/06B6P; C12N5/06B21P                     |
| Zsig33-like peptides and polynucleotides  | US2005048618 (A1) | 3/3/2005   | JASPERS STEPHEN R [US]; SHEPPARD PAUL O [US]; DEISHER THERESA A [US]; BISHOP PAUL D [US]  | ZYMOGENETICS INC [US]   | C07K14/575; C07K14/63                                      |
| Novel FGF homologs  | US2005043234 (A1) | 2/24/2005  | DEISHER THERESA A [US]; CONKLIN DARRELL C [US]  | DEISHER THERESA A, ; CONKLIN DARRELL C  | A61K38/18C; C07K14/50                                      |

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| SGIP PEPTIDES  | WO0100830 (A1) | 1/4/2001   | SHEPPARD PAUL O; JASPERS STEPHEN R;<br>DEISHER THERESA A; BISHOP PAUL D   | ZYMOGENETICS INC [US]  | C07K14/47; C07K14/63 |
| HUMAN THYROID PROTEIN ZSIG45 AND DNA ENCODING  | NO20002832 (A) | 7/20/2000  | DEISHER THERESA A [US]; SHEPPARD PAUL O [US]  | ZYMOGENETICS INC [US]  | C07K14/475           |
| Antibodies and methods of making antibodies to human thyroid protein zsig45                  | US6486304 (B1) | 11/26/2002 | DEISHER THERESA A [US]; SHEPPARD PAUL O [US]  | ZYMOGENETICS INC [US]  | C07K14/47            |
| Human thyroid protein ZSIG45   | US6500925 (B1) | 12/31/2002 | DEISHER THERESA A [US]; SHEPPARD PAUL O [US]  | ZYMOGENETICS INC [US]  | C07K14/47            |
| MOTILIN HOMOLOGS   | NO994614 (A)   | 11/23/1999 | SHEPPARD PAUL O [US]; DEISHER THERESA A [US]  | ZYMOGENETICS INC [US]  | C07K14/575           |
| CARDIAC-DERIVED STEM CELLS A HUMAN 2-19 PROTEIN HOMOLOGUE, Z219C                             | WO9949015 (A2) | 9/30/1999  | DEISHER THERESA A [US]; HANSON BIRGIT [US]; MOORE EMMA E [US]; ROBERTSON TAMARA L [US]; THOMPSON DEBORAH L [US]; LUM KAREN D [US] | ZYMOGENETICS INC [US]; DEISHER THERESA A [US]; HANSON BIRGIT [US]; MOORE EMMA E [US]; ROBERTSON TAMARA L [US]; THOMPSON DEBORAH L [US]; LUM KAREN D [US] | C12N5/06B6P          |
| TESTIS-SPECIFIC TRANSCRIPTION USE OF FACTOR XIII FOR THE MANUFACTURE OF A MEDICAMENT FOR THE | WO9925828 (A1) | 5/27/1999  | CONKLIN DARRELL C; BLUMBERG HAL; DEISHER THERESA A  | ZYMOGENETICS INC [US]  | C07K14/47            |
|  | WO9909168 (A1) | 2/25/1999  | YEE DAVID P; DEISHER THERESA A  | ZYMOGENETICS INC [US]  | C07K14/47A1          |
|  | WO9851333 (A1) | 11/19/1998 | DEISHER THERESA A; BISHOP PAUL D; GARCIA RICHARD M  | ZYMOGENETICS INC [US]  | A61K38/45            |
| HOMOLOGOS DE MOTILINA.   | ES2317664 (T3) | 4/16/2009  | SHEPPARD PAUL O [US]; DEISHER THERESA A [US]  | ZYMOGENETICS INC   | C07K14/575           |
| Motilin homologs   | CN1733918 (A)  | 2/15/2006  | SHEPPARD PAUL O DEISHER THERES [US]   | ZYMOGENETICS INC [US]  | C07K14/575           |
| TREATMENT AGENTS AND METHODS FOR TREATING TYPE II DIABETES AND SYMPTOMS OF                   | WO9827986 (A1) | 7/2/1998   | DEISHER THERESA   | ZYMOGENETICS INC [US]  | A61K31/57            |
| Treatment agents and methods for treating type II diabetes and                               | US5929058 (A)  | 7/27/1999  | DEISHER THERESA A [US]  | ZYMOGENETICS INC [US]  | A61K31/58            |



## ABSTRACTS

Mazer, SP., Fedarau, M., Liu, YL., Hwang, DW., Towe CW., Liu, CF., Olson, KE., Borekman, MJ., Marcus, AJ., **Deisher, TA.**, Pinsky, DJ: Deletion of endothelial ectoapyrase (CD39) promotes atherogenesis in hyperlipidemic mice. *Circulation* 2004 110(17) 79.

Sokolowski K, **Deisher TA**, Silen K, Salimi A, Bree M, Rusche J, Silver S, Purdy S and Wortel C: In Vivo Administration of an anti-CD11b f(AB')<sub>2</sub> (c60.1) inhibits Ex Vivo Mac-1-dependent Phagocytosis by PMN in whole blood from Chimpanzees. *J Leukocyte Biology*, 1994.

**Deisher TA**, Franklin T, Wilson CB and Harlan JM: Tyrosine kinase activity regulates LPS-induced synthesis of IL-6 and GM-CSF, but not adhesion molecules, by HUV EC. *J Cellular Biochemistry* 17A:333, 1993.

Harlan J, Carlos T, Kovach N, **Deisher T**, Haddix T, Montgomery K, Pohlman T and Winn R: Mononuclear leukocyte adhesion to endothelium. *J Cellular Biochemistry* 15C:178, 1992.

**Deisher TA**, Haddix TL, Montgomery KF, Pohlman TH and Harlan JM: Differential regulation of ELAM-1 and VCAM-1 expression in human umbilical vein endothelial cells by protein kinase C. *Circulation* 84(4II) 404, 1991.

**Deisher TA** and Fowler MB: Mechanisms for in vivo induction of myocyte hypertrophy following epinephrine infusion. *J Cellular Biochemistry* 15C:178, 1991.

**Deisher TA**, Billingham ME and Fowler MB: Spontaneous reversibility of epinephrine-induced cardiomyopathy in rats. *Circulation* 82(4) III-292, 1990.

**Deisher T**, Cohen J, Muir C, Moyle M, Napier M, Bunting S: In vitro and ex vivo characterization of a monoclonal antibody (AP-2) to platelet glycoprotein IIb/IIIa in rabbits. *J Cellular Biochemistry* 14A:162, 1990.

Wilcox JN, Hasko JA, **Deisher TA** and Bunting S: Identification of cells expressing tissue factor mRNA by in situ hybridization after in vivo administration of endotoxin to rats. *Thromb Haem* 62(1):348, 1989.

Moyle M, Bullens S, **Deisher T**, Gantzos R, Bunting S, Napier M: Evolutionary divergence of the platelet GP IIb/IIIa complex. *Blood*: 74(7s.1)92a, 1989.

**Deisher TA**, Billingham M, Fowler MB: Superoxide dismutase prevents mortality in chronic epinephrine-treated rats. *Circulation*: 80(4sII)512, 1989.

**Deisher TA**, Ginsburg R, Fowler M: Differential adrenoceptor density changes with selective  $\beta$ -antagonist treatment in epinephrine-induced cardiotoxicity. *Circulation*: 80(4sII)443, 1989.

**Deisher T**, Billingham M, Bristow M, Ginsburg R, Fowler M: Evaluation of the Protective Effect of Several Beta-Adrenoceptor Antagonists in Epinephrine-Induced Cardio toxicity in Rats. *Circ*: 78(4 s.II)30, 1988.

## Civic Activities

May 2001 to present

### **University District Youth Center**

Donor to center, and monthly chef for 60 homeless youths.

May 2002 to Jan 2007

### **Seattle Biotech Legacy Foundation Board Member**

*The Seattle Biotech Legacy Foundation works toward a healthy, sustainable future by promoting science-based understanding, solutions and actions that are grounded in recognition of the interconnected nature of our world.*

Scientific Advisory Group member Mar 2006 to Jan 2007

Board Member to oversee development efforts for SBLF.

Oct 2004 to Jan 2007

Grant Committee member  
*May 2002 to Jan 2006*